
राने क्लिप्स और एप्लीकेटर

(पहला पुनरीक्षण)

Raney Clips and Applicators

(First Revision)

ICS 11.040.30

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भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI - 110002
www.bis.gov.in www.standardsbis.in

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards on the recommendation of the Neurosurgery Instruments, Implants and Accessories Sectional Committee and after approval of the Medical Equipment and Hospital Planning Division Council.

This standard was originally published in 1979. This revision aligns the cross references to the latest standards and incorporates the revised designation for stainless steel. After publication of this standard, IS 9074 : 1979 stands withdrawn.

The composition of the Committee responsible for formulation of this standard is given in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

Indian Standard

RANEY CLIPS AND APPLICATORS

(First Revision)

1 SCOPE

This standard specifies dimensions, material and other requirements for raney clips and clip applicator used in neurosurgery.

2 REFERENCES

The standard given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards.

<i>IS No.</i>	<i>Title</i>
IS 3642 (Part 1) : 1990	Surgical instruments — Specification: Part 1 Non cutting articulated instruments (<i>second revision</i>)
IS 6911 : 2017	Stainless steel plate, sheet and strip — Specification (<i>second revision</i>)
IS 6603 : 2001	Stainless steel bars and flats — Specification (<i>first revision</i>)
IS 7531 : 1990	Methods for testing of corrosion resistance of stainless steel surgical instruments (<i>first revision</i>)

3 SHAPE AND DIMENSIONS

Shall be as shown in Fig. 1 and Fig. 2. Tolerance of ± 2.5 percent is permissible on all dimensions.

4 MATERIAL

4.1 Clips

The clips shall be made of stainless steel sheet of 0.40mm thickness conforming to Designation X30Cr13 of IS 6911.

4.2 Clip Applicator

The arms of the applicator shall be made from stainless steel conforming to Designation X40Cr13 of IS 6603.

The spring shall be of stainless steel strip conforming to Designation X30Cr13 of IS 6911.

5 WORKMANSHIP AND FINISH

5.1 Clips

5.1.1 The clip shall be formed in one piece. It shall be free from burrs, sharp edges and other defects.

5.1.2 The teeth shall be reasonably sharp so that they provide an effective grip but do not pierce into the skin.

5.2 Applicator

5.2.1 The applicator shall be free from scale, burrs, cracks, pits, tool marks and other surface defects.

5.2.2 The joint, the finger loops and the spring assembly shall be as shown in Fig. 2. All edges and the corners of the applicator shall be smoothly rounded off.

5.2.3 The spring action shall be neither too hard nor slack. There shall be no play at the joint.

5.3 The clips and the applicator shall be finished bright and passivated.

6 HEAT TREATMENT

The clips and the spring for applicator shall be hardened and tempered to a hardness of 400 HV to 450 HV. The applicator arms shall be uniformly hardened and tempered to a hardness of 500 HV to 660 HV.

7 TESTS

7.1 Flexibility

Take a piece of hard rubber 8 mm thick and grip it within the clip with the help of the applicator. Now remove the clip. Repeat it 10 times. There shall be no permanent set in the clip.

7.2 Corrosion Resistance

Clips and Applicators shall show no sign of corrosion when tested in accordance with IS 7531.

8 MARKING

8.1 Each applicator and clip shall be marked by etching or otherwise with the manufacturer's name, initials or registered trade-mark and the word 'Stainless'.

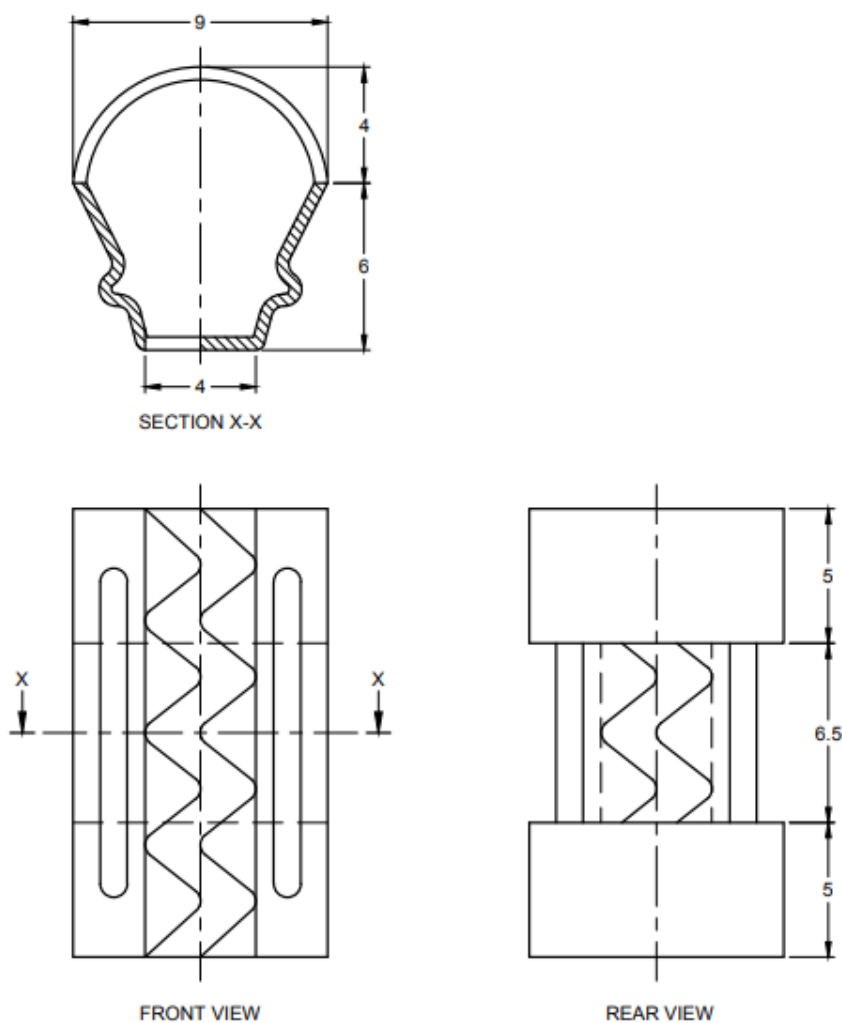
8.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity

assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.

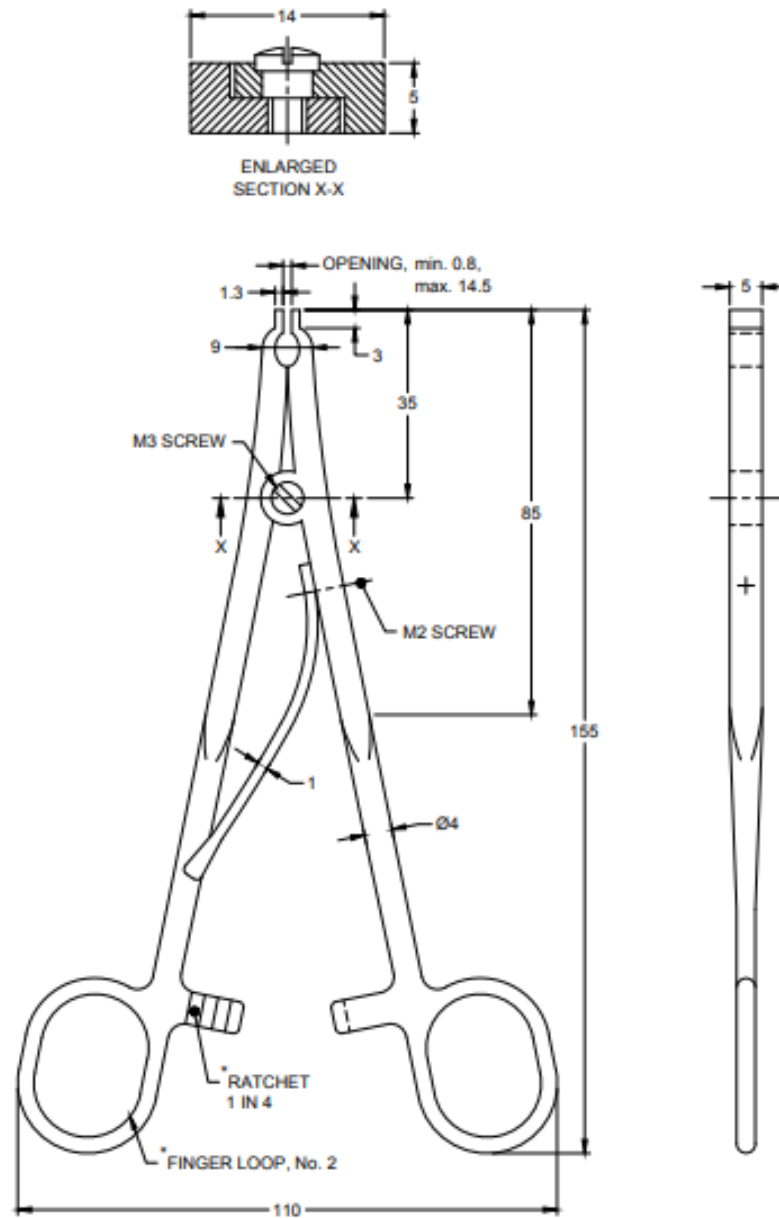
9 PACKING

Packing may be done as agreed between the purchaser and the manufacturer or in accordance with the current trade practices. (Only biodegradable material shall be used for packaging)



ALL DIMENSIONS IN MILLIMETRES.

FIG. 1 RANEY CLIP



*SEE IS 3642 (PART 1) : 1990

ALL DIMENSIONS IN MILLIMETRES.

FIG. 2 APPLICATOR, RANEY CLIP

ANNEX A

(Foreword)

COMMITTEE COMPOSITION

Neurosurgery Instruments Implants and Accessories Sectional Committee, MHD 07

<i>Organization(s)</i>	<i>Representative(s)</i>
G B Pant Hospital, New Delhi	PROF DALJIT SINGH (Chairperson)
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B. Braun Medical India Private Limited, New Delhi	DR ANMOL KUMAR RAY MS GAYATRI GARG (<i>Alternate I</i>) SHRI ARIHANT JAIN (<i>Alternate II</i>)
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Indian Institute of Technology Hyderabad, Hyderabad	DR ARAVIND KUMAR RENGAN DR AVINASH ERANKI (<i>Alternate I</i>) DR KOUSIK SARATHY S. (<i>Alternate II</i>)
Indian Institute of Technology Kanpur, Kanpur	DR NITIN GUPTA DR D. S. KATTI (<i>Alternate</i>)
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Johnson and Johnson Private Limited, Mumbai	SHRI YATEEN SHAH

<i>Organization(s)</i>	<i>Representative(s)</i>
Kalam Institute of Health Technology, Vishakhapatnam	DR JITENDAR SHARMA SHRI DILIP KUMAR CHEKURI (<i>Alternate I</i>) SUSHMITHA CHOWDARY (<i>Alternate II</i>)
King George's Medical University, Lucknow	DR B. K. OJHA DR. ANIL CHANDRA (<i>Alternate</i>)
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MS UROOSA WARSI
SCIENTIST 'B'/ASSISTANT DIRECTOR
(MEDICAL EQUIPMENT AND HOSPITAL PLANNING), BIS

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402

Website: www.bis.gov.in

Regional Offices:

	Telephones
Central : 601/A, Konnectus Tower -1, 6 th Floor, DMRC Building, Bhavbhuti Marg, New Delhi 110002	{ 2323 7617
Eastern : 8 th Floor, Plot No 7/7 & 7/8, CP Block, Sector V, Salt Lake, Kolkata, West Bengal 700091	{ 2367 0012 2320 9474
Northern : Plot No. 4-A, Sector 27-B, Madhya Marg, Chandigarh 160019	{ 265 9930
Southern : C.I.T. Campus, IV Cross Road, Taramani, Chennai 600113	{ 2254 1442 2254 1216
Western : Plot No. E-9, Road No.-8, MIDC, Andheri (East), Mumbai 400093	{ 2821 8093

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